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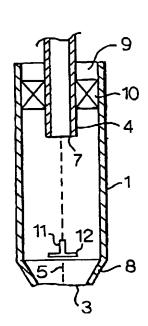
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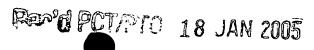
For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SWIRL TUBE SEPARATOR



(57) Abstract: Swirl tube separator for separating solids from a gas-solid containing feed comprising a tubular housing, an inlet for introducing a gas-solids mixture at one end of said housing, a solids outlet opening at the opposite end of said housing, and a co-axial positioned tubular gas outlet conduit placed at an end of said housing, wherein along the axis of the tubular housing a vortex extender pin is present.





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- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

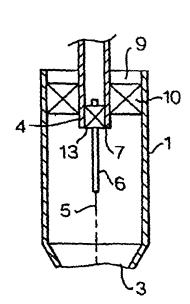
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(54) Title: CYCLONE SEPARATOR WITH A VORTEX EXTENDER PIN



(57) Abstract: Swirl tube separator for separating solids from a gas-solid containing feed comprising a tubular housing, an inlet for introducing a gas-solids mixture at one end of said housing, a solids outlet opening at the opposite end of said housing, and a co-axial positioned tubular gas outlet conduit placed at an end of said housing, wherein along the axis of the tubular housing a vortex extender pin is present.

